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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/919,706	08/01/2001	Kenichi Nanpei	1232-4747	5403

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EXAMINER

HUNTSINGER, PETER K

ART UNIT PAPER NUMBER

2625

DATE MAILED: 04/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/919,706

Applicant(s)

NANPEI, KENICHI

Examiner

Peter K. Huntsinger

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-11, 13-19 and 21-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-11, 13-19 and 21-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/23/06 has been entered.

Response to Arguments

2. Applicant's arguments filed 28 June 2005 have been fully considered but they are not persuasive.

Applicant argues on page 10 of the response that:

The power-saving state of Takahashi et al. is not a sleep state because the image sensing device is still operable.

a. Examiner respectfully disagrees. Takahashi et al. disclose cutting off power to the display (col. 19, lines 31-33). Cutting off the power to a component of the image sensing device is considered a sleep state because according to the definition within the art, a sleep state is a computer setting where, usually after a pre-set idle period, the computer shuts down unnecessary operations such as

the display monitor and disk drive. Further, the application does not provide a definition of the term sleep state.

Claim Objections

2. Claims 2, 11, and 19 are objected to because of the following informalities: The phrase "before or after the apparatus set to the sleep state" should be changed to "before or after the apparatus is set to the sleep state". Appropriate correction is required.

3. Claims 10 and 26 are objected to because of the following informalities: Claim 10 should be changed to "A control method for an image reading apparatus which operates under control of an external apparatus ~~and~~ which comprises". Claim 26 should be changed to "A storage medium that stores a program for implementing a control method for an image reading apparatus which operates under control of an external apparatus ~~and~~ which comprises an image sensing unit for reading an image, an interface for transferring an image signal read by the image sensing unit to the external apparatus, and a detector for detecting an abnormality of the interface on the basis of an electric potential of a predetermined position of the interface, the medium comprising: Appropriate correction is required.

Claim Rejections - 35 USC § 102

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4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 2, 5-11, 13-19, and 21-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Takahashi et al. European Publication 0862313.

Referring to claims 1, 10, and 18, Takahashi et al. disclose an image reading apparatus which operates under control of an external apparatus comprises an image sensing unit for reading an image, and a interface for transferring an image signal read by the image sensing unit to the external apparatus (Fig. 1, 101 and 102), the image apparatus comprising: a detector for detecting an abnormality of the interface on the basis of an electric potential of a predetermined position of the interface (control unit 104 of Fig. 1, col. 4, lines 14-19); and a controller for, when said detector detects any abnormality of the interface during an image reading process controlled by said external apparatus, setting said image reading apparatus in a sleep state until the communication with the external apparatus restarts (col. 19, lines 11-18, 31-33).

Referring to claims 2, 11, and 19, Takahashi et al. disclose wherein at least one of an internal circuit and mechanical position of the image sensing unit is initialized to the state identical to the state at the time when the apparatus is powered before or after the apparatus is set to the sleep state (col. 19, lines 11-18, 31-33).

Referring to claims 5, 13, and 21, Takahashi et al. disclose an A/D converter for converting the image signal output from the image sensing unit into a digital signal (col.

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4, lines 5-13), wherein the interface transfers the digital image signal converted by said A/D converter to the external apparatus (col. 4, lines 38-44). Takahashi et al. disclose a CCD for converting the analog values into a digital image signal. It is inherent that a CCD has an A/D converter for converting light into an electric signal.

Referring to claims 6, 14, and 22, Takahashi et al. disclose wherein said detector detects any abnormality of the interface by detecting a change in potential of a power supply line included in the interface (col. 4, lines 20-24).

Referring to claims 7, 15, and 23, Takahashi et al. disclose wherein said detector detects any abnormality of the interface by detecting a change in potential of a data line included in the interface (col. 4, lines 14-20).

Referring to claims 8, 16, 24, and 27, Takahashi et al. disclose wherein the interface has a function of allowing to plug/unplug a cable without turning off a power supply of the external apparatus (col. 17, lines 42-45).

Referring to claims 9, 17, 25, and 28, Takahashi et al. disclose wherein the function of the interface complies with USB or IEEE1394 (col. 3, lines 51-56).

Referring to claim 26, Takahashi et al. disclose a storage medium that stores a program for implementing a control method (col. 19, lines 48-55) for an image reading apparatus which operates under control of an external apparatus and comprises an image sensing unit for reading an image, an interface for transferring an image signal read by the image sensing unit to the external apparatus, and a detector for detecting an abnormality of the interface on the basis of an electric potential of a predetermined position of the interface, comprising: computer readable program code means for, when

the detector detects any abnormality of the interface during an image reading process controlled by said external apparatus (control unit 104 of Fig. 1, col. 4, lines 14-19), setting the image reading apparatus in sleep state until the communication with the external apparatus restarts (col. 19, lines 11-18, 31-33).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al. European Publication 0862313 as applied to claims 1, 10, and 18 above, and further in view of Marwin Patent 5,280,162.

Referring to claim 4, Takahashi et al. disclose setting a sleep state with a controller, but do not disclose expressly a moving unit or a setting unit for controlling the light source in a sleep state. Marwin discloses a light source for irradiating a document with light (laser diode, col. 5, lines 20-23); an image sensor for converting light reflected by a document irradiated with light from said light source into an electrical image signal (photodetector 12 of Fig. 1, col. 5, lines 60-62); a moving unit for moving a relative position between an image of the document and said image sensor (motor control circuitry 22 of Fig. 1, col. 5, lines 23-26); and a setting unit for stopping power supply to at least one of said light source and said moving unit in the sleep state in accordance

with a setup of a controller (col. 6, lines 25-27). Takahashi et al. and Marwin are combinable because they both are from the same field of peripheral image sensors. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to implement the scanner of Marwin into the image reading system of Takahashi et al. The motivation for doing so would have been to allow easy portability for the image reading device. Further, the image reading device of Marwin is simply a generic type of image reading device which could be substituted for the image reading device of Takahashi et al. Therefore, it would be obvious to combine Marwin with Takahashi et al. to obtain the invention as specified in claim 4.

Conclusion

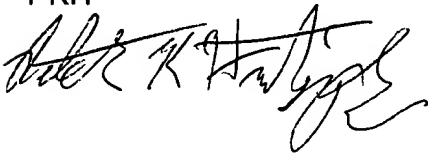
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter K. Huntsinger whose telephone number is (571)272-7435. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly Williams can be reached on (571)272-7471. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PKH

A handwritten signature in black ink, appearing to be 'Robert K. Hattig', written over the printed name PKH.A handwritten signature in black ink, appearing to be 'KA Williams', written over the printed name KA Williams.

KIMBERLY WILLIAMS
SUPERVISORY PATENT EXAMINER